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## PALM INTRANET

### Inventor Name Search Result

Your Search was:

Last Name = OGURA

First Name = ATSUSHIKO

Application#	Patent#	Status	Date Filed	Title	Inventor Name
<a href="#">09980719</a>	6673361	150	11/15/2001	POLYMER, IN VIVO DEGRADABLE MATERIAL, AND USE	OGURA, ATSUSHIKO
<a href="#">10512424</a>	Not Issued	020	10/25/2004	CROSSLINKED POLYMERS, FINE POLYMER PARTICLE, AND PROCESS FOR PRODUCING THESE	OGURA, ATSUSHIKO
<a href="#">10810305</a>	Not Issued	030	03/26/2004	POLYETHYLENE GLYCOL-MODIFIED SEMICONDUCTOR NANOPARTICLES, METHOD FOR PRODUCING THE SAME, AND MATERIAL FOR BIOLOGICAL DIAGNOSIS	OGURA, ATSUSHIKO
<a href="#">10913305</a>	Not Issued	020	08/05/2004	METHOD FOR PREPARING SEMICONDUCTOR NANOCRYSTALS HAVING CORE-SHELL STRUCTURE	OGURA, ATSUSHIKO

Inventor Search Completed: No Records to Display.

Search Another: Inventor

Last Name	First Name	
<input type="text" value="Ogura"/>	<input type="text" value="Atsuhiko"/>	<input type="button" value="Search"/>

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Terms	Documents
L2 and (water adj soluble)	11

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 US Patents Full-Text Database  
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 EPO Abstracts Database  
 JPO Abstracts Database  
 Derwent World Patents Index  
 IBM Technical Disclosure Bulletins

Search:

L3






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### Search History

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result set

*DB=USPT; PLUR=YES; OP=OR*

<u>L3</u>	L2 and (water adj soluble)	11	<u>L3</u>
<u>L2</u>	L1 and (polyethylene adj glycol)	15	<u>L2</u>
<u>L1</u>	semiconductor adj nanoparticles	132	<u>L1</u>

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☐ 1. Document ID: US 6855551 B2

AB: The present invention provides a composition comprising fluorescent semiconductor nanocrystals associated to a compound, wherein the nanocrystals have a characteristic spectral emission, wherein said spectral emission is tunable to a desired wavelength by controlling the size of the nanocrystal, and wherein said emission provides information about a biological state or event.

Full	Title	Citation	Front	Review	Classification	Date	Reference			Claims	KWIC	Draw Des
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☐ 2. Document ID: US 6774361 B2

AB: A novel encoding system and methods for determining the location and/or identity of a particular item or component of interest is provided. In particular, the present invention utilizes a "barcode" comprising one or more sizes of semiconductor nanocrystals (quantum dots) having characteristic spectral emissions, to either "track" the location of a particular item of interest or to identify a particular item of interest. The semiconductor nanocrystals used in the inventive "barcoding" scheme can be tuned to a desired wavelength to produce a characteristic spectral emission in narrow spectral widths, and with a symmetric, nearly Gaussian line shape, by changing the composition and size of the quantum dot. Additionally, the intensity of the emission at a particular characteristic wavelength can also be varied, thus enabling the use of binary or higher order encoding schemes. The information encoded by the quantum dot can be spectroscopically decoded, thus providing the location and/or identity of the particular item or component of interest. In particular, a single primary light source can be used to decode the inventive barcode. In particularly preferred embodiments, the present system and method is used in applications to security systems, to the tracking of consumer items such as jewelry, vehicles, or paper. In other particularly preferred embodiments, the present system and method is used in applications for biochemistry to track the location of biomolecules such as DNA sequences, combinatorial chemistry, and genomics for encoding and probe identifiers.

Full	Title	Citation	Front	Review	Classification	Date	Reference			Claims	KWIC	Draw Des
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☐ 3. Document ID: US 6649138 B2

AB: Water-dispersible nanoparticles are prepared by applying a coating of a multiply amphipathic dispersant to the surface of a hydrophobic nanoparticle comprised of a semiconductive or metallic material. The multiply amphipathic dispersant has two or more hydrophobic regions and two or more hydrophilic regions, and is typically polymeric. Preferred polymeric dispersants are comprised of (1) a hydrophobic backbone with hydrophilic branches, (2) a hydrophilic backbone with hydrophobic branches, or (3) a backbone that may be either hydrophobic or hydrophilic, and substituted with both hydrophilic and hydrophobic branches. Monodisperse populations of water-dispersible nanoparticles are also provided, as are conjugates of the water-dispersible nanoparticles with affinity molecules such as peptides, oligonucleotides, and the like.

Full	Title	Citation	Front	Review	Classification	Date	Reference			Claims	KWIC	Draw. Des
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☐ 4. Document ID: US 6617583 B1

AB: A novel encoding system and methods for determining the location and/or identity of a particular item or component of interest is provided. In particular, the present invention utilizes a "barcode" comprising one or more sizes of semiconductor nanocrystals (quantum dots) having characteristic spectral emissions, to either "track" the location of a particular item of interest or to identify a particular item of interest. The semiconductor nanocrystals used in the inventive "barcoding" scheme can be tuned to a desired wavelength to produce a characteristic spectral emission in narrow spectral widths, and with a symmetric, nearly Gaussian line shape, by changing the composition and size of the quantum dot. Additionally, the intensity of the emission at a particular characteristic wavelength can also be varied, thus enabling the use of binary or higher order encoding schemes. The information encoded by the quantum dot can be spectroscopically decoded, thus providing the location and/or identity of the particular item or component of interest. In particular, a single primary light source can be used to decode the inventive barcode. In particularly preferred embodiments, the present system and method is used in applications to security systems, to the tracking of consumer items such as jewelry, vehicles, or paper. In other particularly preferred embodiments, the present system and method is used in applications for biochemistry to track the location of biomolecules such as DNA sequences, combinatorial chemistry, and genomics for encoding and probe identifiers.

Full	Title	Citation	Front	Review	Classification	Date	Reference			Claims	KWIC	Draw. Des
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☐ 5. Document ID: US 6602671 B1

AB: A novel encoding system, compositions for use therein and methods for determining the source, location and/or identity of a particular item or component of interest is provided. In particular, the present invention utilizes a collection of one or more sizes of populations of semiconductor nanocrystals having characteristic spectral emissions, to "track" the source or location of an item of interest or to

identify a particular item of interest. The semiconductor nanocrystals used in the inventive compositions can be selected to emit a desired wavelength to produce a characteristic spectral emission in narrow spectral widths, and with a symmetric, nearly Gaussian line shape, by changing the composition and size of the semiconductor nanocrystal. Additionally, the intensity of the emission at a particular characteristic wavelength can also be varied, thus enabling the use of binary or higher order encoding schemes.

Full	Title	Citation	Front	Review	Classification	Date	Reference			Claims	KWIC	Draw. Des
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☐ 6. Document ID: US 6444143 B1

AB: A water soluble semiconductor nanocrystal capable of light emission is provided, including a quantum dot having a selected band gap energy, a layer overcoating the quantum dot, the overcoating layer comprised of a material having a band gap energy greater than that of the quantum dot, and an organic outer layer, the organic layer comprising a compound having a least one linking group for attachment of the compound to the overcoating layer and at least one hydrophilic group space apart from the linking group by a hydrophobic region sufficient to prevent electron charge transfer across the hydrophobic region. The particle size of the nanocrystal core is in the range of about 12.ANG. to about 150.ANG., with a deviation of less than 10% in the core. The coated nanocrystal exhibits photoluminescence having quantum yield of greater than 10% in water.

Full	Title	Citation	Front	Review	Classification	Date	Reference			Claims	KWIC	Draw. Des
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☐ 7. Document ID: US 6337117 B1

AB: An optical memory device comprising a luminous material capable of increasing and/or memorizing a photoluminescence intensity (hereinafter referred to as a "luminous intensity") as a function of irradiation energy of excitation light. And the luminous material comprises nanoparticles, diameters of which are smaller than Bohr radius of the luminous material so that excitons generated in the nanoparticles undergo quantum containment state in which the electrons and holes are individually contained as a result of irradiation with excitation light.

Full	Title	Citation	Front	Review	Classification	Date	Reference			Claims	KWIC	Draw. Des
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☐ 8. Document ID: US 6326144 B1

AB: The present invention provides a composition comprising fluorescent semiconductor nanocrystals associated to a compound, wherein

the nanocrystals have a characteristic spectral emission, wherein said spectral emission is tunable to a desired wavelength by controlling the size of the nanocrystal, and wherein said emission provides information about a biological state or event.

Full	Title	Citation	Front	Review	Classification	Date	Reference			Claims	KMTC	Draw. Des
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☐ 9. Document ID: US 6319426 B1

AB: A water-soluble semiconductor nanocrystal capable of light emission is provided. The nanocrystal including a semiconductor nanocrystal core having a selected band gap energy, a shell layer overcoating the core comprised of a semiconductor material having a band gap energy greater than that of the semiconductor nanocrystal, and an outer layer comprised of a molecule having at least one linking group for attachment of the molecule to the overcoating shell layer and at least one hydrophilic group optionally spaced apart from the linking group by a hydrophobic region sufficient to prevent electron charge transfer across the hydrophobic region.

Full	Title	Citation	Front	Review	Classification	Date	Reference			Claims	KMTC	Draw. Des
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☐ 10. Document ID: US 6306610 B1

AB: The present invention provides a composition comprising fluorescent semiconductor nanocrystals associated to a compound, wherein the nanocrystals have a characteristic spectral emission, wherein said spectral emission is tunable to a desired wavelength by controlling the size of the nanocrystal, and wherein said emission provides information about a biological state or event.

Full	Title	Citation	Front	Review	Classification	Date	Reference			Claims	KMTC	Draw. Des
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Terms	Documents
L2 and (water adj soluble)	11

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☐ 11. Document ID: US 6251303 B1

AB: A water soluble semiconductor nanocrystal capable of light emission is provided, including a quantum dot having a selected band gap energy, a layer overcoating the quantum dot, the overcoating layer comprised of a material having a band gap energy greater than that of the quantum dot, and an organic outer layer, the organic layer comprising a compound having at least one linking group for attachment of the compound to the overcoating layer and at least one hydrophilic group spaced apart from the linking group by a hydrophobic region sufficient to prevent electron charge transfer across the hydrophobic region. The particle size of the nanocrystal core is in the range of about 12 .ANG. to about 150 .ANG., with a deviation of less than 10% in the core. The coated nanocrystal exhibits photoluminescence having quantum yields of greater than 10% in water.

Full	Title	Citation	Front	Review	Classification	Date	Reference			Claims	KWIC	Draw. Des
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Terms	Documents
L2 and (water adj soluble)	11

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